FIG.1

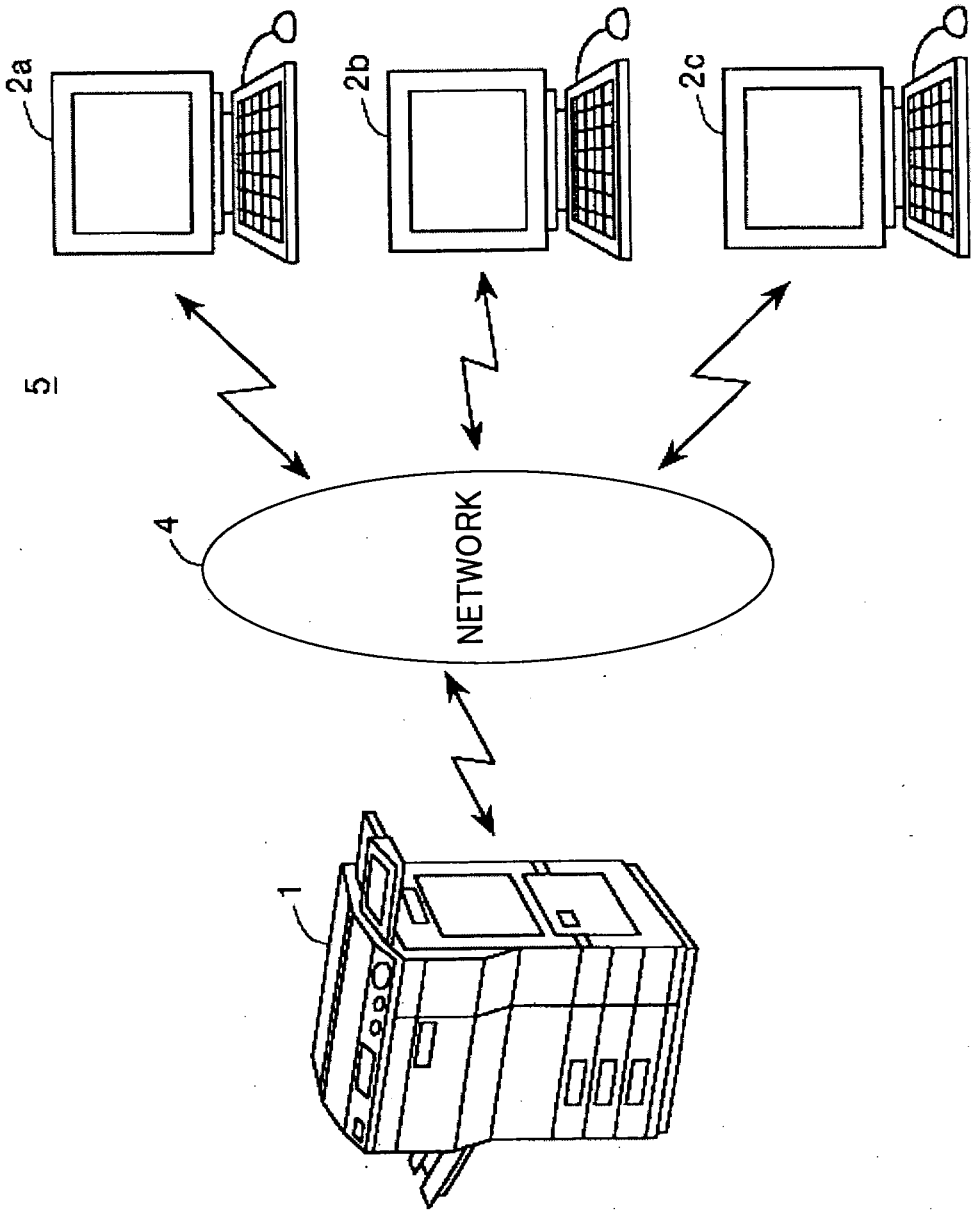
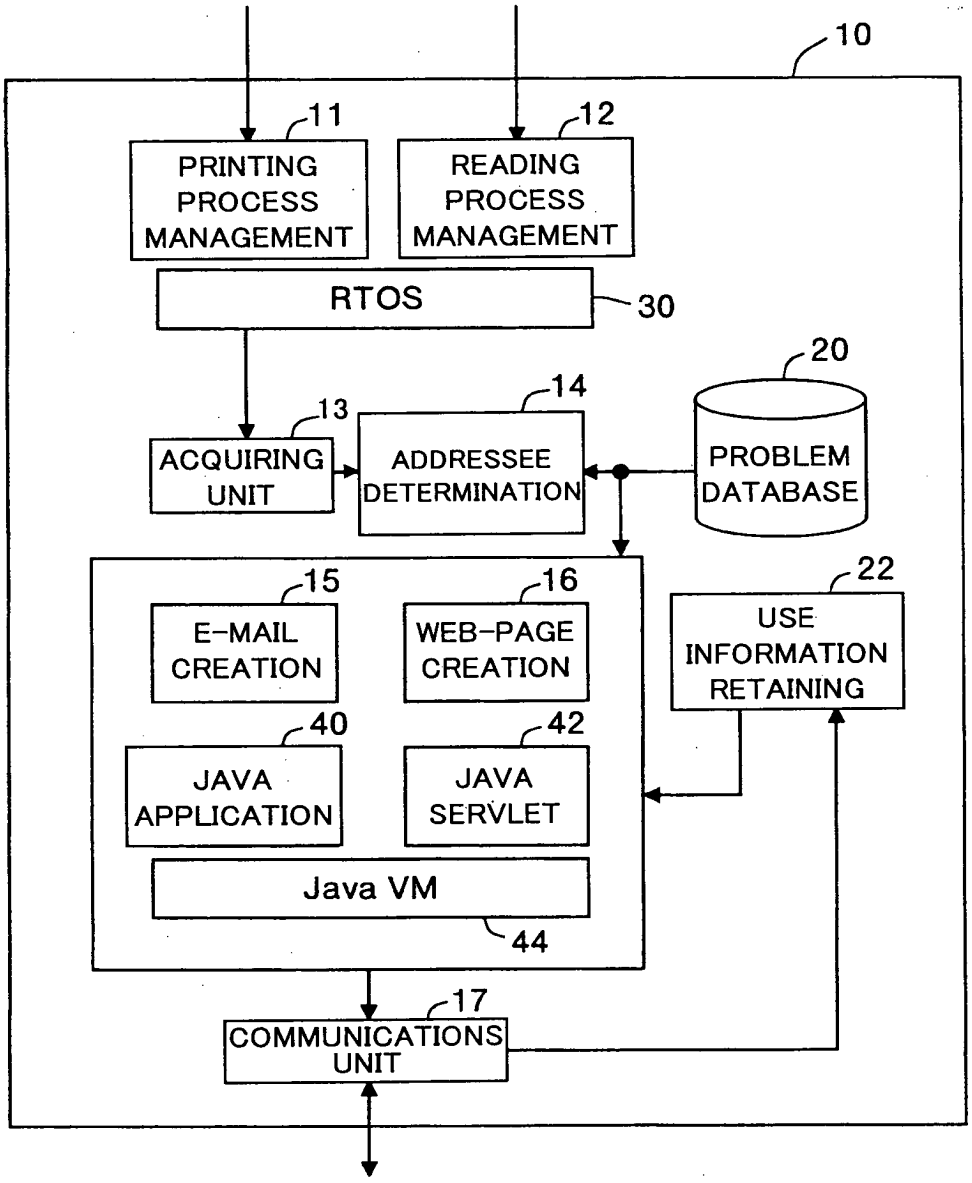


FIG.2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11
PRINTING PROCESS MANAGEMENT
12
READING PROCESS MANAGEMENT
RTOS
30
20
14
13
ACQUIRING UNIT
ADDRESSEE DETERMINATION
PROBLEM DATABASE
15
E-MAIL CREATION
16
WEB-PAGE CREATION
22
USE INFORMATION RETAINING
40
JAVA APPLICATION
42
JAVA SERVLET
Java VM
44
17
COMMUNICATIONS UNIT

FIG.3

20a PROBLEM	20b ADDRESSEE	20c MESSAGE	20d PROBLEM ID CODE	20e RESTORATION MEASURES
PAPER TRAY EMPTY	xxx@.OO (User's E-mail Address)	There is no paper left in paper supply tray.	ER10	Please supply paper and …
PAPER JAM		Paper jam has occurred.	ER11	⋮
⋮		⋮	⋮	
PRINT JOB UNEXECUTED	xxx@.OOO (User's E-mail Address) xΔx@OOO (In-house System Administrator's E-mail Address)	Execution of print job was unsuccessful.	ER21	Please clear the job and …
⋮		⋮	⋮	⋮
MALFUNCTION IN OPTICAL SYSTEM	ΔΔΔ@.OO (SC Maintenance Person's E-mail Address)	Optical system has problem in …	SC20	Please power off and …
MALFUNCTION IN PAPER-FEED MOTOR		Paper-feed motor has problem in …	SC21	
⋮		⋮	⋮	⋮

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DOCKET #: 242936US2
INV: Hidejirou MAEHARA
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FIG.4

MACHINE ID	
LOCATION (MAP DATA)	
USER	NAME
	E-MAIL ADDRESS
	PASSWORD
	APPARATUS NAME
SYSTEM ADMINISTRATOR	NAME
	EMAIL ADDRESS
	PASSWORD
	APPARATUS NAME
SC MAINTENANCE PERSON	NAME
	E-MAIL ADDRESS
	PASSWORD
	APPARATUS NAME
⋮	

FIG.5

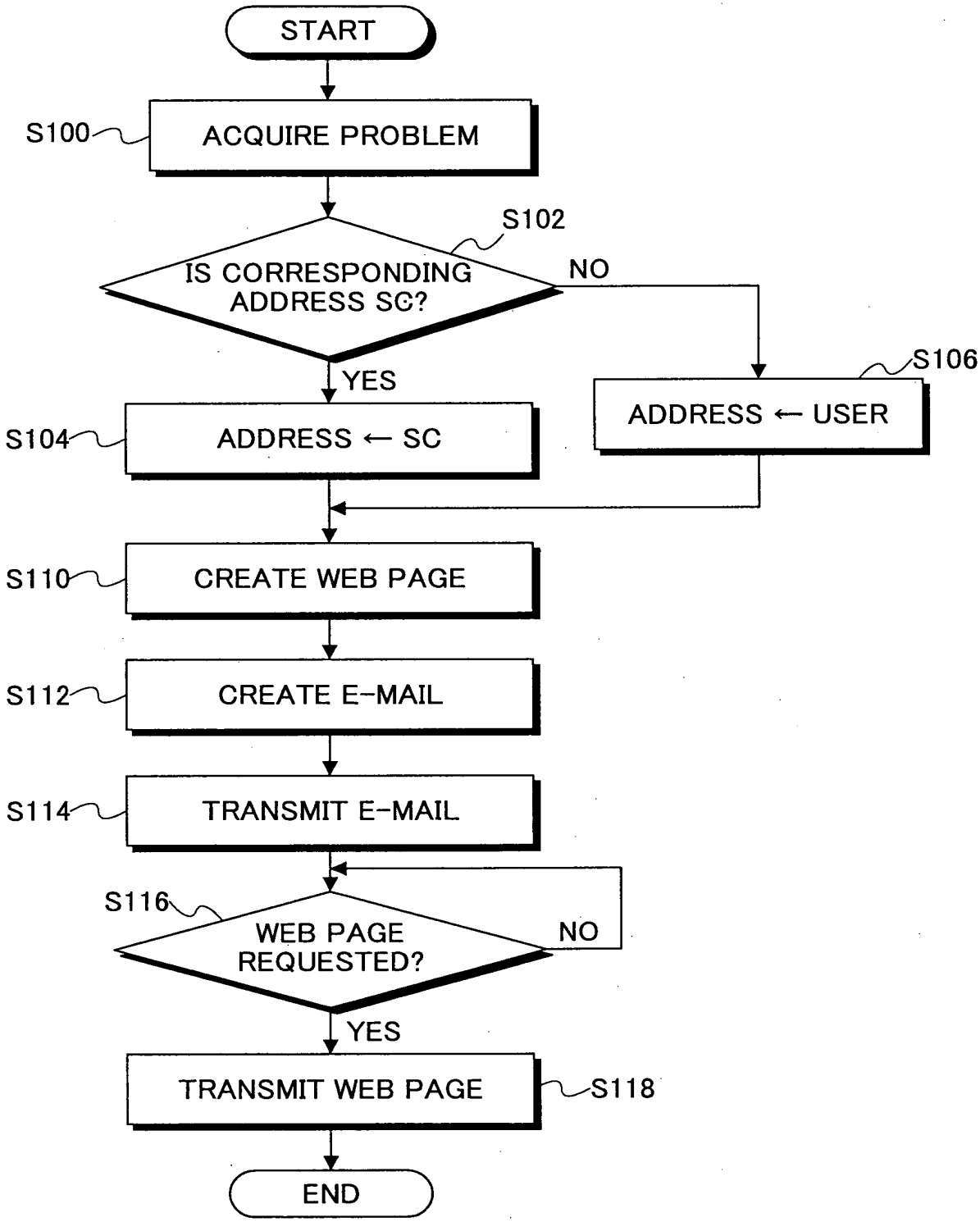

START
S100
ACQUIRE PROBLEM
S102
IS CORRESPONDING ADDRESS SC?
NO
YES
S104
ADDRESS ← SC
S106
ADDRESS ← USER
S110
CREATE WEB PAGE
S112
CREATE E-MAIL
S114
TRANSMIT E-MAIL
S116
WEB PAGE REQUESTED?
NO
YES
TRANSMIT WEB PAGE
S118
END

FIG.6A

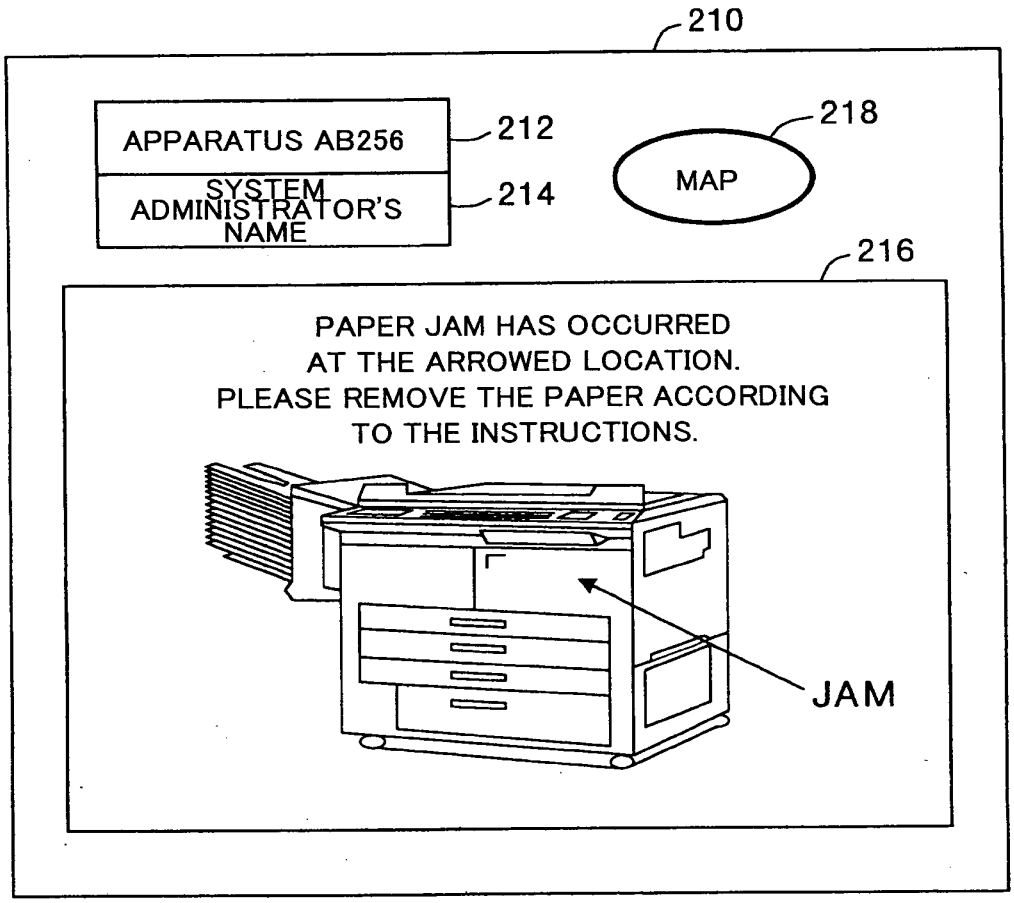

210
APPARATUS AB256
212
SYSTEM ADMINISTRATOR'S NAME
214
MAP
218
216
PAPER JAM HAS OCCURRED
AT THE ARROWED LOCATION.
PLEASE REMOVE THE PAPER ACCORDING
TO THE INSTRUCTIONS.
JAM

FIG.6B

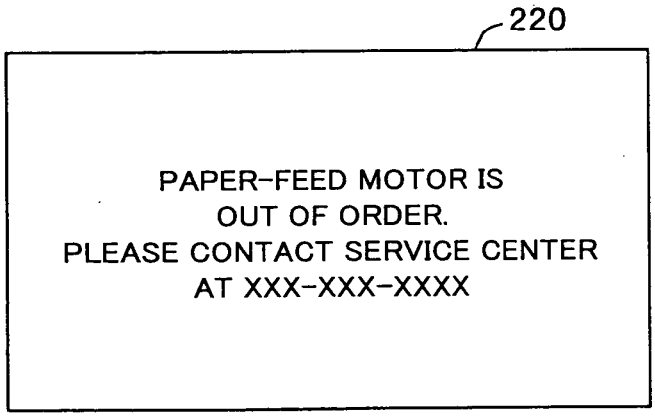

220
PAPER-FEED MOTOR IS
OUT OF ORDER.
PLEASE CONTACT SERVICE CENTER
AT XXX-XXX-XXXX

FIG.7

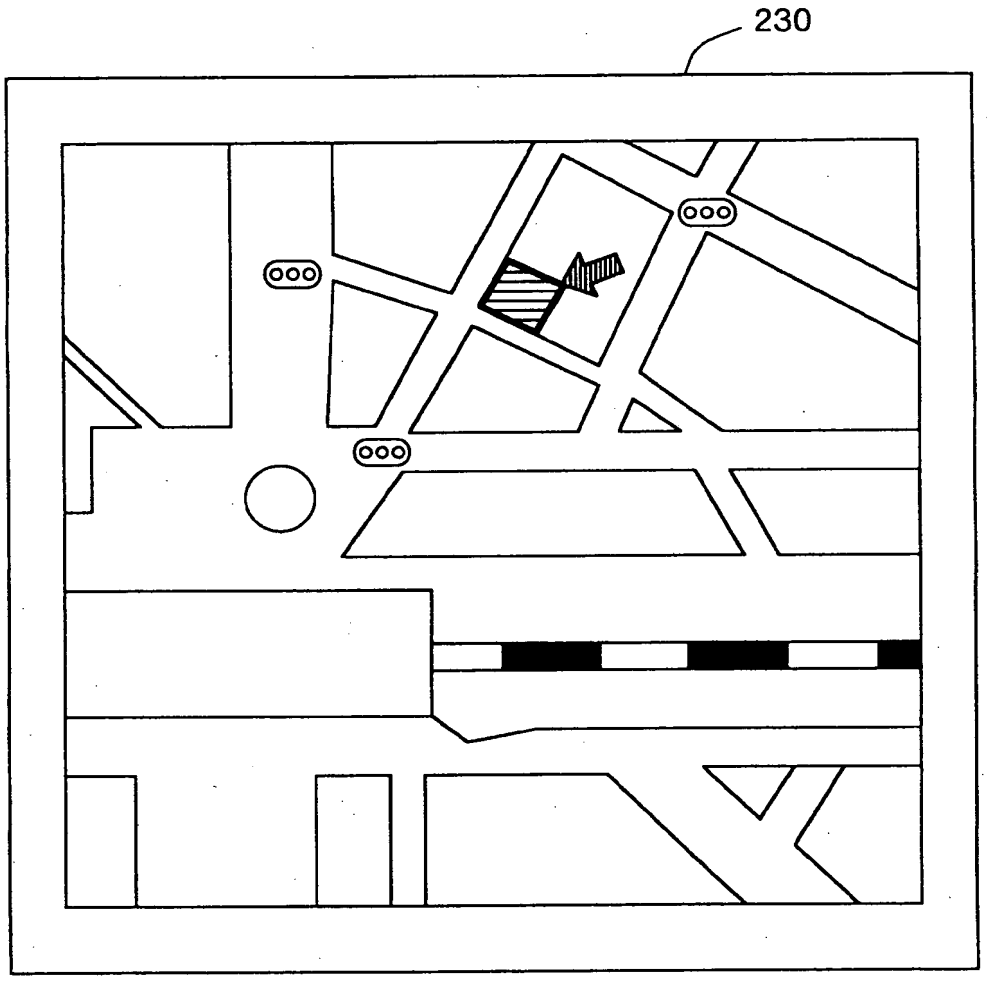


FIG.8

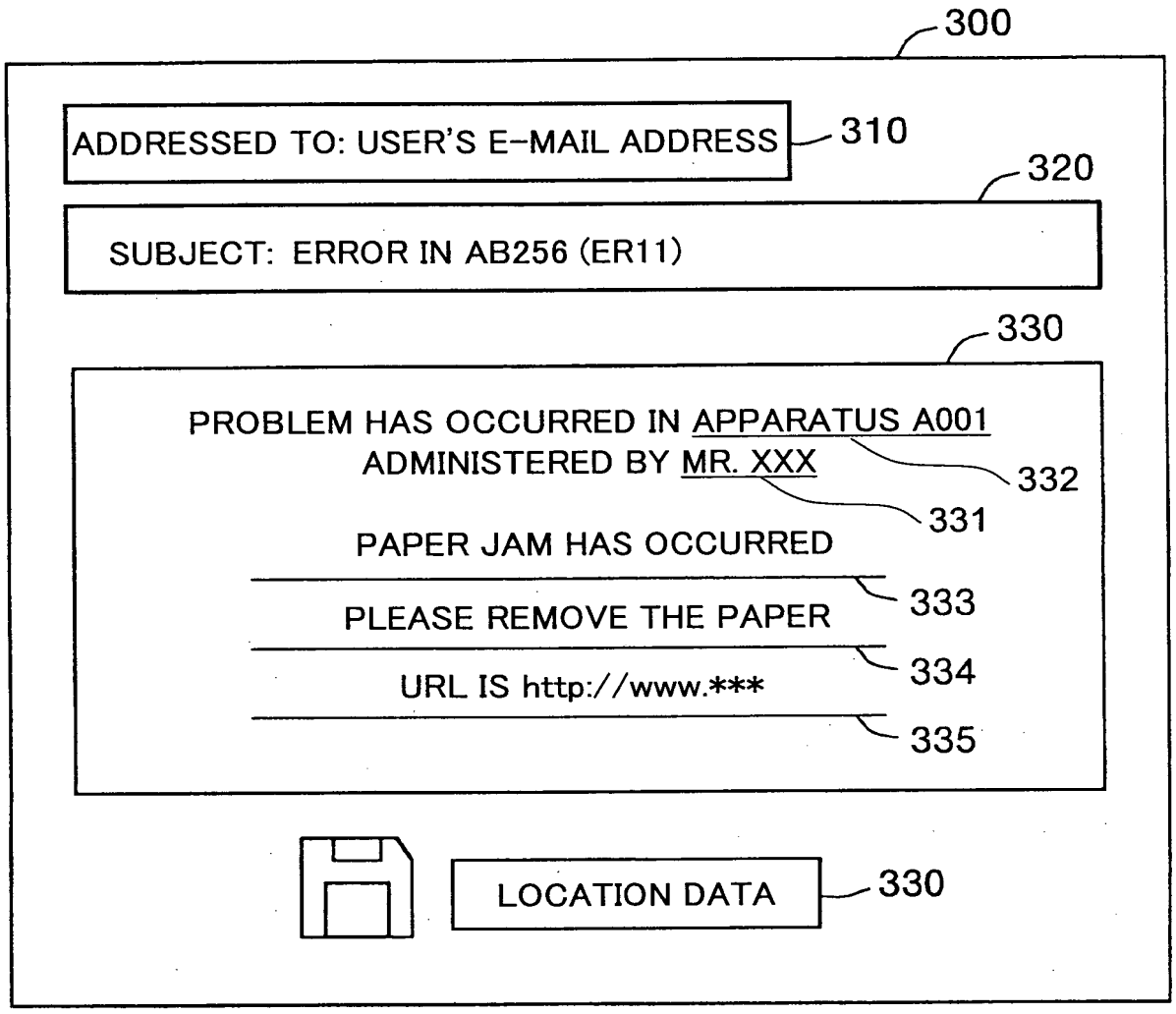
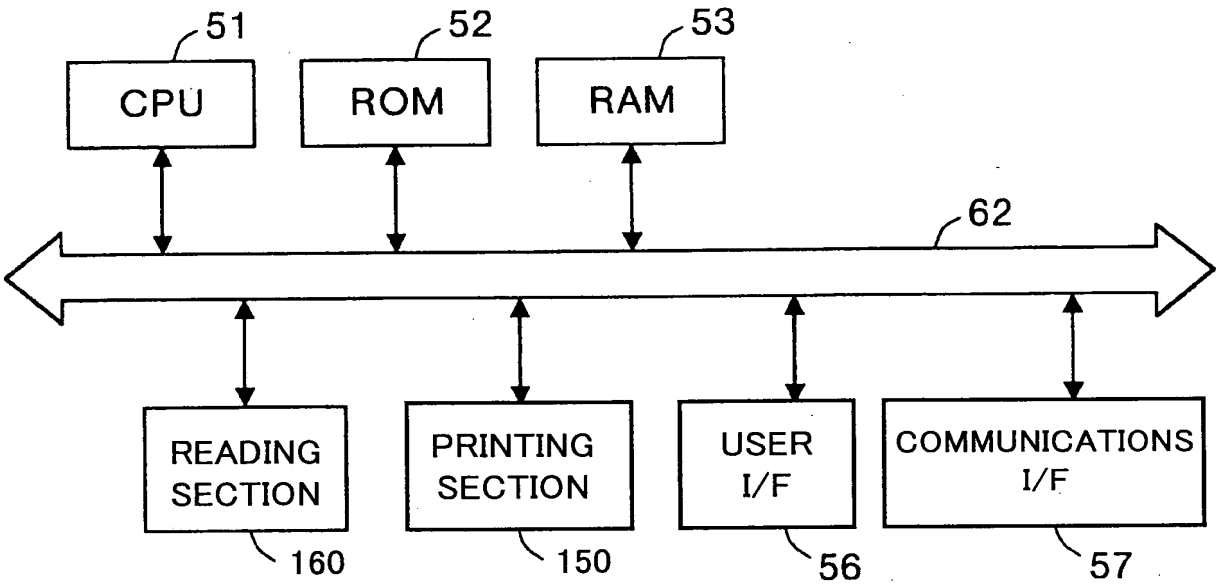

300
ADDRESSED TO: USER'S E-MAIL ADDRESS
310
320
SUBJECT: ERROR IN AB256 (ER11)
330
PROBLEM HAS OCoccurred IN APPARATUS A001
ADMINISTERED BY MR. XXX
332
331
PAPER JAM HAS OCCURRED
333
PLEASE REMOVE THE PAPER
334
URL IS http://www.***
335
LOCATION DATA
330

FIG.9


51
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CPU
ROM
RAM
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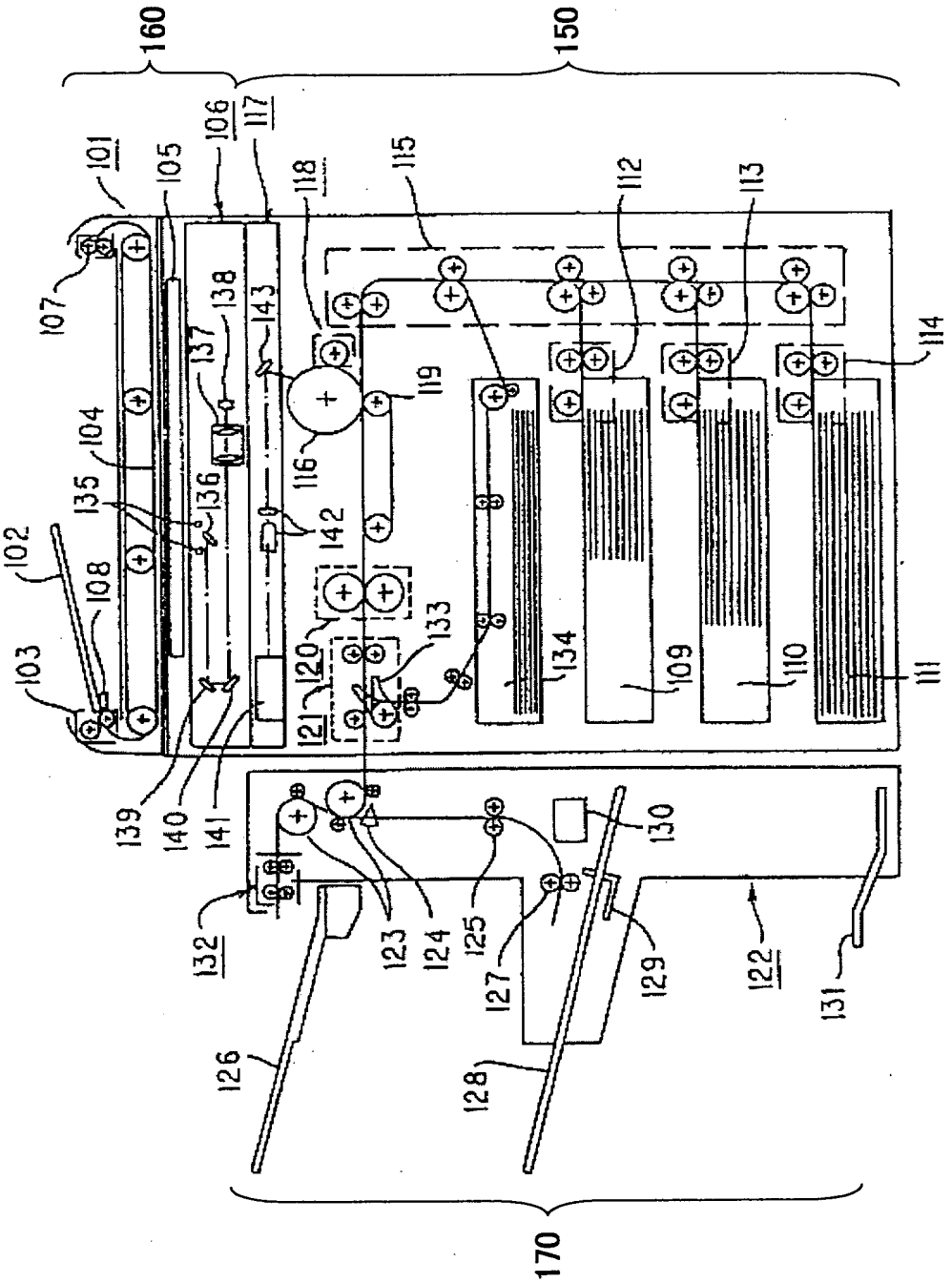
READING SECTION
160
PRINTING SECTION
150
USER I/F
56
COMMUNICATIONS I/F
57

FIG.10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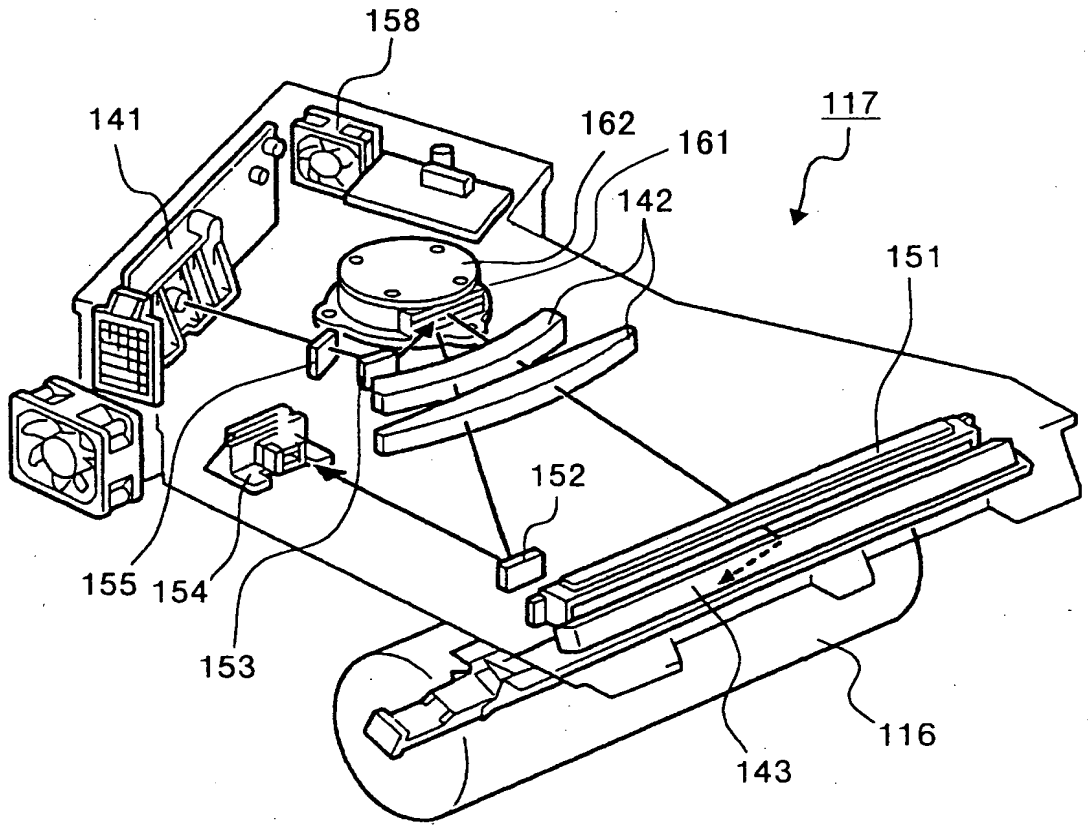
FIG.11